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L'OREAL USA/ PATENT DEPARTMENT
30 TERMINAL AVENUE
CLARK, NJ 07066

EXAMINER	
RAE, CHARLESWORTH E	

ART UNIT	PAPER NUMBER
1614	

MAIL DATE	DELIVERY MODE
12/04/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/799,281	QUADIR, MURAT	
	Examiner	Art Unit	
	Charleswort Rae	1614	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *04 September 2007*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1 and 3-51* is/are pending in the application.

4a) Of the above claim(s) *43-46* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,3-42 and 47-51* is/are rejected.

7)☒ Claim(s) *1 and 47* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Applicant's arguments, filed 9/4/07, have been fully considered but they are not deemed to be persuasive. Rejections and/or objections not reiterated from previous office actions are hereby withdrawn. The following rejections and/or objections are either reiterated or newly applied. They constitute the complete set of actions being applied to the instant application.

Status of the Claims

Claims 1, and 3-51 are currently pending in this application.

Claims 43-46 are withdrawn for being directed to non-elected subject matter.

Claims 1, 3-42, and 47-51 are presented for examination.

Response to applicant's arguments/remarks

Non-statutory obviousness-type double patenting (ODP) rejection

This rejection is withdrawn in view of the claim amendment.

Rejection under 102(b)

This rejection is withdrawn in view of the claim amendment.

Rejection under 103(a)

This rejection is withdrawn in view of the claim amendment.

Written description rejection under 112, first para

This rejection is withdrawn in view of the claim amendment.

Rejection under 112, 2nd para

This rejection is withdrawn in view of the claim amendment.

Objection to the Claims

Claims 1 and 47 are objected to for being identical duplicates of each other.

Applicant is required to correct this deficiency.

Claim rejections – 35 USC 112 – Second Paragraph

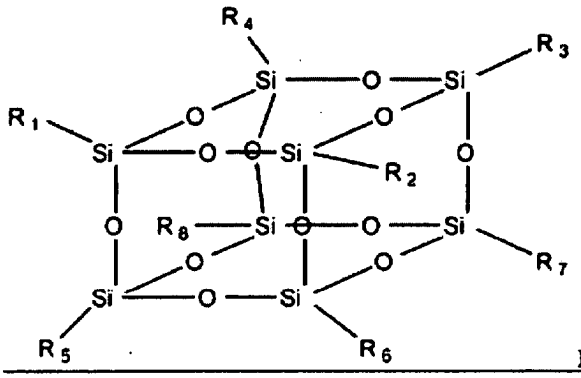
The following is a quotation of the second paragraph of 35 USC 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1, 3-42, 47-51 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

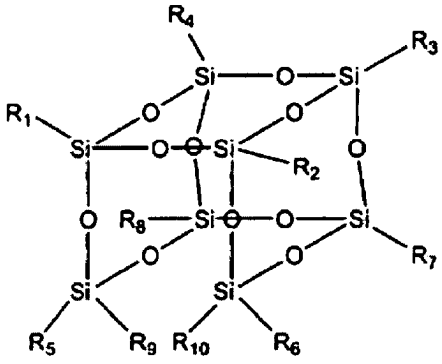
Claims 1 and 47 recite certain confusing claim language that render these claims indefinite. For instance, the term "wherein

said at least one POSS has structure of Formula I

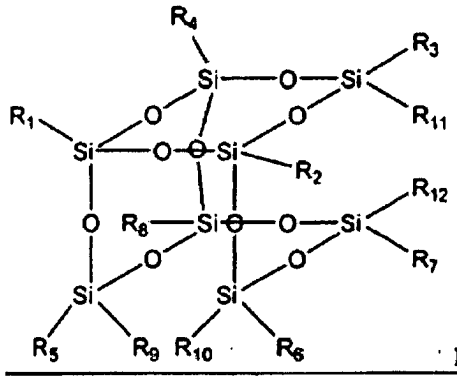


FORMULA I,

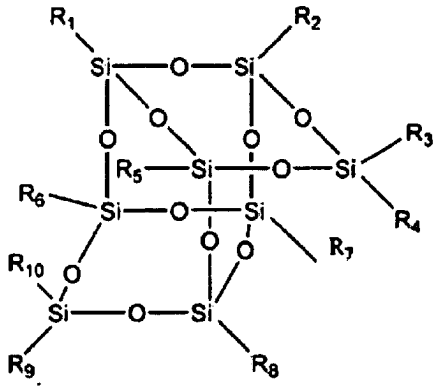
wherein said at least one POSS has structure of Formula II or III



FORMULA IIA



FORMULA IIB



FORMULA IIC

... wherein at least one of R1-R12 is methyl, ethyl, propyl, isobutyl, isocytl, phenyl, cyclohexyl, cyclopentyl, ...aid POSS being present in an amount effective to provide a desired degree of a predetermined personal care property; and at least one personal care ingredient, with the proviso that, if said at least one POSS has the structure of Formula I, said POSS molecule is either not completely substituted with methyl groups or the majority of all polyhedral oligomeric silesquioxanes contained within said personal care product are in the form of a complete cage of Formula I-; ..." is

unclear. The confusing language *"wherein said at least one POSS has structure of Formula I ... wherein said at least one POSS has structure of Formula II or III ..."* renders the claim unclear as it is not clear whether the "at least one POSS has structure of Formula I," also has a structure of Formula II or III. Also, it is unclear how Formula II relates to Formula IIA, Formula IIB, Formula IIC, Formula IID, and Formula IIE.

Claims 3-42, 48-51 are rejected for the same reason as these claims fail to correct the deficiency of the claims from which they depend.

Claims 1 and 47 are rejected for being indefinite on different grounds for reciting chemical formulae wherein it is unclear to distinguish between the cancelled subject matter and the claimed subject matter. For instance, the specific bond linkage between certain Si atoms and O atoms is unclear as can be seen by an inspection of recited formula I, Formula IIA, Formula IIB, Formula IID, Formula IIE, and Formula III.

Claims 12, 13, 14, 15, 35, 37 recite the confusing term *"no more than about."* The term **"no more than"** reasonably implies a maximum amount that cannot be exceeded; however, the metes and bounds of the term *"no more than about"* are rendered unclear in view of the recitation of the additional term *"about."*

Claims 21, 32, 48, 50, for example, recite the confusing term *"between about,"* while claims 35, 37, and 50, for example, recite the term confusing term *"no less than about."* Like the term *"no more than about,"* the terms *"between about"* and *"no less than about"* renders the claims indefinite.

Claim 8 recites the term *" wherein said at least one POSS is present in an amount of at least about 40 % or less by weight of said product;"* claims 9, 22, and 33

recite the term "wherein said at least one POSS is present in an amount of at least about 20 % or less by weight of said product; claim 10 recites the term *"wherein said at least one POSS is present in an amount of about 20% or less by weight of said product;"* claims 23, 34, and 49 recite the term *"wherein said at least one POSS is present in an amount of about 10% or less by weight of said product."* The specific recitation of the term ***"or less by weight"*** in claims 8, 9, 10, 22, 23, 33, 34, and 49 renders these claims indefinite for omitting essential subject matter as the term "or less by weight" reasonably reads on **"zero amount"** of POSS even though the instant claims require POSS to be present in an amount effective to provide a desired degree of a predetermined personal care property.

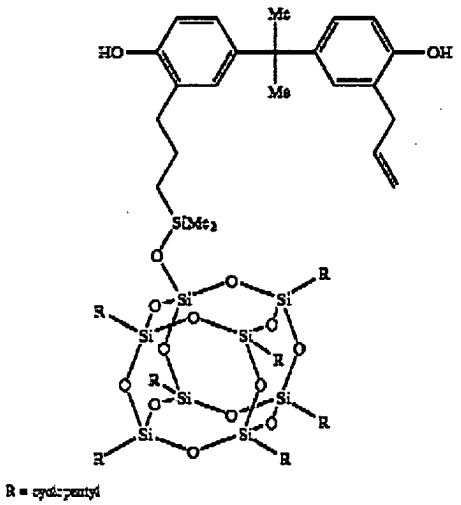
Claim rejections – 35 USC 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1, 3-30, 32-36, and 47-51 are rejected under 35 USC 102(b) as being anticipated by Yang et al. (US Patent Publication No. 2004/0120915 A1).

Yang et al. (US Patent Publication No. 2004/120915 A1) teach cleaning and protection compositions such has lotion, soap, cream, aerosol, and gel comprising polyhedral oligomeric silsequioxane (POSS), which have a variety of applications including from skin care and home hygiene, wherein the POSS, for example, have the below chemical formulas, and wherein R and X can be modified to be either hydrophobic or hydrophilic (see page 1, para 007 to page 2, para 0017, including Fig. 1; and page 2, para 0018 to page 17, para 0107):



R = cyclopentyl

[0020] 1-[3-(allylbiphenol)propyidimethylsiloxy]3,5,7, 9,11,13,15heptacyclopentylpentacyclo-[9.5.1.13,9.15, 15.17,13]octasiloxane;

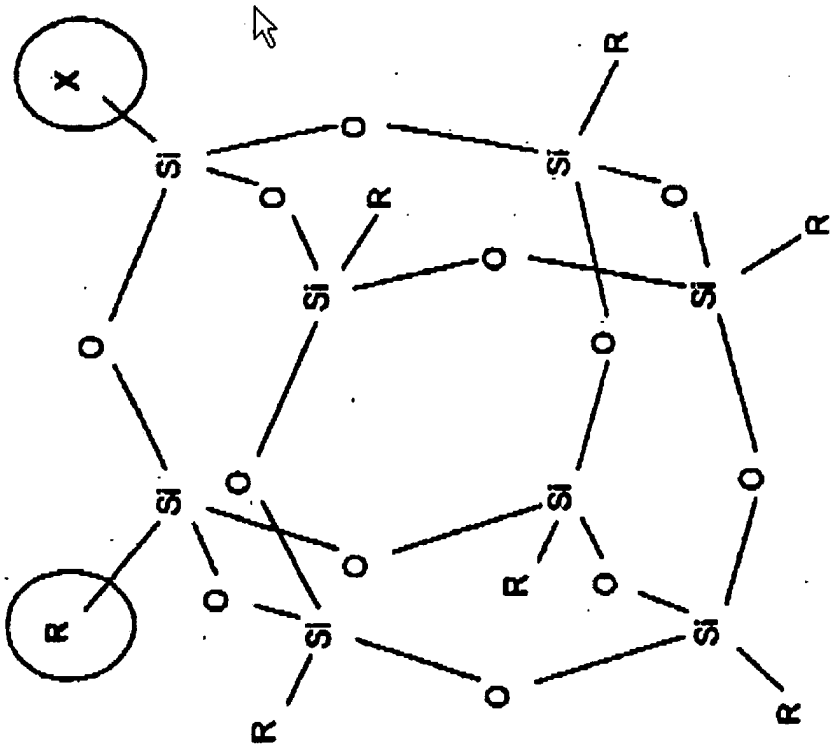
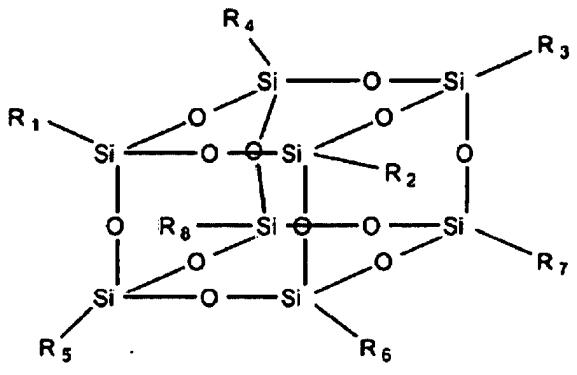


FIG. 1

Instant claims 1, 20, 31, and 47, for example, recitė the below Formula I, which overlaps with the above referenced teaching of Yang et al :



FORMULA I

Yang et al. also teach that the compositions may provide, for example, molecular-level benefits, form breathable protection layers on a surface (e.g. skin), provide UV protection, and provide foaming effects (see abstract; and page 1, para 0006 to page 25, para 0176). The R and X groups can be modified to be either hydrophobic or hydrophilic (see page 2, para 0018 to page 14, para 0088; see also Figure 1). Claims 1 and 47, for example, recite the term " ... *POSS being present in an amount effective to provide a desired degree of a predetermined personal care property; and at least one personal care ingredient, with the proviso that, if said at least one POSS has the structure of Formula I, said POSS molecule is either not completely substituted with methyl groups or the majority of all polyhedral oligomeric silsesquioxanes contained within said personal care product are in the form of a complete cage of Formula I, and wherein said personal care product of claim 1, is formulated as a sunscreen composition, suntan product, antiperspirant, deodorant, cold cream, moisturizer, cleaner, shampoo, conditioner, dual shampoo/conditioner, rinse, cream rinse, cosmetic, hair coloring, hair dye, bleaching composition, styling product, cleansing cream, soap, perfume and cologne, powder, permanent waving product, relaxers, preshave, shaving cream, shaving product, after shaving product, bath product, self tanning product, bleaching product, or a hair shine product;*" claims 3, 21, 32, 48, recite the term " *[t]he personal care product of claims 1 formulated in the form of a liquid, solid, cream, ointment, solution, gel, mousse, stick , cream, spray, powder, emulsion or dispersion ...;*" these claim limitations overlap with the teaching of Yang et al. (see abstract; page 2, para 0018 to page 14, para 0088; Figure 1; and page 21, para 0136 to page 25, para 0176, Examples 1-32). Yang et al. exemplify compositions comprising 5% of POSS by weight (page 22, para 0148 to page 25, para 0176); reference claim 13 is directed to a composition comprising water in an amount of between about 10 and 90 weight percent and a POSS compound in an amount of between a positive amount and 50 weight percent, and hydrocarbon (page 26, col 1.)

Claim 4 recites the term " *wherein said at least one POSS is present in an amount of at least about 0.005% by weight of said product;*" *claim 5 recites the term " wherein said at least one POSS is present in an amount of at least about 0.01% by weight of said product;*" claim 6 recites the term " *wherein said at least one POSS is present in an amount of at least about 0.05% by weight of said product;*" claim 7 recites the term " *wherein said at least one POSS is present in an amount of at least about 0.1% by weight of said product;*" claim 8 recites the term " *wherein said at least one POSS is present in an amount of at least about 40 % or less by weight of said product;*" claims 9, 22, and 33 recite the term " *wherein said at least one POSS is present in an amount of at least about 20 % or less by weight of said product;* claim 10 recites the term " *wherein said at least one POSS is present in an amount of about 20% or less by weight of said product;* claims 23, 34, and 49 recite the term " *wherein said at least one POSS is present in an amount of about 10% or less by weight of said product;* claims 21, 32, and 48 recite the term " *wherein said at least one POSS is present in an amount of between about 0.01% and about 40% by weight of said product;* these claim limitations given their broadest reasonable possible interpretation are construed to overlap with the teaching of Yang et al.(see page 22, para 0148 to page 25, para 0176; and reference claim 13).

Claims 11, 24, 26, 35, 37, and 50 are directed to personal care product, wherein the at least one personal care

> ingredient is an absorbent, alphahydroxy acid, betahydroxy acid, polyhydroxy acid, antiacne agent, antiperspirant, anticaking agent, antifoaming agent, antimicrobial agent, antioxidant, antidandruff agent, astringent, binder, bleaching agent, buffer, biological additive, bulking agent, carrier, chelating agent, coupling agent, compatibilizer, conditioner, colorant, cosmetic astringent, cosmetic biocide, denaturant, drug astringent,

detergent, deodorant, dispersant, external analgesic, emulsifier, film former, foaming agent, fragrance and fragrance component, hair styling ingredient, hair holding ingredient (mousse, spray, etc.), hair conditioner, hair color, hair growth promoter, humectant, keratolytic, moisturizer, straightening agent, oxidizer, mineral and organic particle, plastic, polymer, permanent waving agent, opacifying agent, perfume, pH adjuster, pigment, preservative, protein, retinoid, reducing agent, sequesterant, skin bleaching agent, skin conditioning agent, skin smoothing agent, skin soothing agent, skin healing agent, softener, solubilizing agent, surfactant, lubricant, thickener, penetrant, permeation enhancer, analgesic, anti-inflammatory agent, antibiotic, anesthetic, plasticizer, salt, solvent essential oil, sunscreen and UV-absorber, vitamin, provitamine, plant extract, ceramide and pseudoceramide.

Claims 12, 35, and 50 recite the term " wherein said at least one personal care ingredient is present in an amount of no more than about 99.995% by weight of said product;" claim 13 recites the term " wherein said at least one personal care ingredient is present in an amount of no more than about 99.99% by weight of said product;" claim 14 recites the term " wherein said at least one personal care ingredient is present in an amount of no more than about 99.95% by weight of said product;" claim 15 recites the term " wherein said at least one personal care ingredient is present in an amount of no more than about 99.9% by weight of said product;" claim 16 recites the term " wherein said at least one personal care ingredient is present in an amount of at least about 10% by weight of said product;" claims 17, 25, 27, 36, 38, and 51 recite the term *" wherein said at least one personal care ingredient is present in an amount of at least about 60% by weight of said product;"* claim 18 recites the term *" wherein said at least one personal care ingredient is present in an amount of at least about 80% by weight of said product;"* claim 19 recites the term *" wherein said at least one personal care ingredient is present in an amount of at least about 90% by weight of*

said product;" claims 24, 26, and 37 recites the term *" wherein said at least one personal care ingredient ..., which is present in an amount of no more than about 99.995% by weight of said product and no less than about 10% by weight of said product;"* claim 19 recites the term *" wherein said at least one personal care ingredient is present in an amount of at least about 90% by weight of said product;"* claim 18 recites the term *" wherein said at least one personal care ingredient is present in an amount of at least about 80% by weight of said product."* These recited amounts of the at least one personal care ingredient, given their broadest reasonable possible interpretation are construed to reasonably overlap with the teaching of Yang et al. (see page 22, para 0148 to page 25, para 0176; and reference claim 13). Claim 11 recites the term *" wherein said at least one personal care ingredient is ... carrier, solvent, essential oil, sunscreen and UV-absorber ..."* Further, water as taught by Yang et al. is reasonably construed to be a carrier, or solvent; Examples 2 and 6 of Yang et al. are directed to UV-absorbers (pages 21-22).

Thus, claims 1, 3-30, 32-36, and 47-51 are found to be anticipated by Yang et al.

Claim rejections – 35 USC 103(a)

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation

under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 31, and 37-38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yang et al. (US Patent Publication No. 2004/0120915 A1), in view of Lichtenhan et al. (US Patent 6,660,823).

The discussion of Yang et al. in connection with the above rejection under 102(e) is incorporated by reference.

Although Yang et al. teach that POSS compounds having a cage composed of silicon and oxygen, wherein the number of R groups are selected from the group consisting of 4, 8, 10, 12, and 14 , Yang et al. do not teach the instantly claimed POSS compounds of formula II and III as recited in claim 31, for example (see reference claims 5-6).

Lichtenhan et al. (US Patent 6,660,823) teach methods for controlling the stereo chemistry of functionalities or X groups to exo or endo positions on a polyhedral oligomeric silesquioxane (POSS) compound and POSS species formed by said methods, wherein the resulting polyhedral oligomeric silesquioxane species can then undergo additional chemical manipulations, such as cage expansion or reduction (see abstract; col. 4, line 1 to col. 12, line 27; and col. 20, lines 30-52).

Based on the teaching of Yang et al. that polyhederal oligomeric silsequioxane (POSS) allows greater flexibility in delivering active agents to a surface as well as for

surface protection from irritants such that compositions comprising said POSS may provide molecular-level benefits, form breathable protection layers on a surface (e.g. skin), provide UV protection, and provide foaming effects or allow users (consumers) to know when or if the cleaning is complete, someone of skill in the art would have been motivated to combine the teachings of Yang et al. and Lichtenhan et al. to create the instant inventive concept.

Thus, someone of skill in the art at the time the instant invention was made would have found it obvious to create the instant claimed invention with reasonable predictability.

Claims 1, 3-42, and 47-51 are rejected under 35 U.S.C. 103(a) as being unpatentable over Legrow et al., in view of Lichtenhan et al. (US Patent 6,660,823) , further in view of James et al. James et al. (US Patent Publication 2002/0128414), and further in view of Guichard et al. (US Patent 6,491,981).

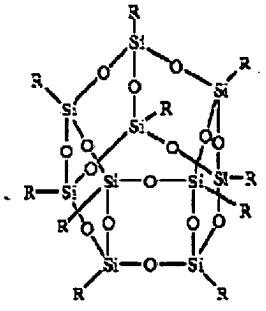
Legrow et al. (US Patent 6,489,274) teach liquid rinse-off compositions for personal care comprising a trimethyl-silyalkylsilsesquioxane, wherein the rinse-off compositions provide excellent rinse feel and skin mildness; said compositions are suitable for simultaneously cleansing and conditioning of the skin and/or the hair and can be used in the form of foam bath preparations, shower products, skin cleansers, hand cleansers, face cleansers and body cleansers, shampoos etc. (col. 1, lines 7-17).

Instant claims 1, and 47 recite the term "[a] personal care product ...;" Claims 1, and 47 recite the term *"formulated as a sunscreen composition, suntan product, antiperspirant, ... moisturizer, cleaner, shampoo, cosmetic, hair coloring, hair dye, bleaching composition, styling product, cleansing cream, soap, perfume and cologne, powder, ... shaving cream, hair shine product, bath product, bleaching product...;"* claim 3, for example, recites the *terms "liquid, solid, solution, cream, ointment, gel, mousse, stick, spray, powder, emulsion or dispersion."* Legrow et al. teach that silicones are found in many personal care products including topical skincare products, 2-in-1 hair shampoo-conditioners, color cosmetics (mascara, lipstick), anti-perspirants and deodorants (col. 1, lines 29-32). Claims 1, and 47 recite one or more of the following terms, for example, "antiperspirant, deodorant, dual shampoo/conditioner, hair coloring, hair dye, solvent, solubilizing agent, fragrance, oxidizer ..." which overlap with the teaching of Legrow et al. Claims 3 and 48, for example, recite the term "stick," which reasonably encompasses lipstick as taught by Legrow et al. Legrow teach liquid rinse-off compositions for personal care comprising at least 0.1% by weight of at least one trimethyl-silylalkylsilsesquioxane of the formula (1): Me3 SiO--[Si(R)(OsiMe3)O]x – SiMe3 (1) wherein Me is methyl, R is a straight or branched alkyl group having from 6 to 18 carbon atoms and **x is a number from 1 to 10**, wherein the rinse-off compositions comprise from 0.1 to 40 % by weight of water-soluble surfactants (col. 2, line 44 to col. 3, line 64); water in an amount at least 50% by weight (col. 3, lines 65-67); polymeric cationic conditioning agents in preferred amounts of 0.01% to 5% by weight, including guar gums, cationic polysaccharides, cationic homopolymers and copolymers derived

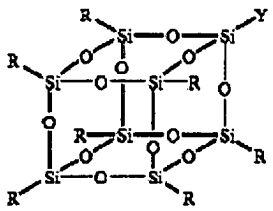
from acrylic and/or methacrylic acid ...," which reasonably overlaps with the personal care ingredients encompassed by the instant claims i.e. in claim 11 (see also reference col. 8, Example - Conditioning Shampoo 2-n-1). The amount of personal care ingredient in the personal care product as recited in claims 12 13, 14, 15, 16, 17, 18, 24, 25, 26, 35, 36, 37, 38, 50, 51 ranges from *"no more than 99.995% by weight of said product" to "at least about 10% by weight of said product,"* which is construed to reasonably overlap with the teaching of Legrow et al. as water present in the amount of at least 50% is reasonably construed to function as a solvent. Besides, the term "at least about 10% by weight of said product," given its broadest reasonable possible interpretation is construed to encompass the at least 2% by weight of water-soluble surfactant (= personal care ingredient) as taught by Legrow et al.; the amount of personal care ingredient as recited in the instant claims are also construed to constitute optimization in the absence of evidence to the contrary. The amount of the at least one POSS present in the personal care product as recited in claims 4, 5, 6, 7, 8, 9,10, 21, 22, 23, 32, 33, 34, 48, 49, for example, range from *"at least about 0.01% by weight of said product"* to *"an amount of about 40% or less by weight of said product,"* which reasonably overlaps with the amount of trimethyl-silylalkylsilsesquioxane in the personal care products as taught by Legrow et al.; the amounts of POSS as recited in the instant claims are reasonably construed to represent optimization. The term *"POSS being present in an amount effective to provide a desired degree of a predetermined personal care property"* as recited in claim 1, for example, is reasonably construed to be an inherent characteristic of the claimed compositon. Legrow et al. teach rinse-off

formulations which guarantee effective cleansing together with other supplemental benefits such as improved sensory, conditioning, gloss and sheen properties. Legrow et al. teach in recent years considerable research concerning the ultimate fate of organosilicones (atmosphere, lakes and rivers) has been carried out; for example, phenyl substituents are oxidized and/or homolytically cleaved off to form benzene and/or phenol(both of which are pollutants of the environment (col. 1, lines 38-43).

James et al. also teach copolymers prepared from a monomeric mixture comprising a) an itaconate ester at about O to about 60 weight percent, preferably about 20 to about 55 weight percent; and a POSS compound of structure I at about 3 to about 85 weight percent, preferably about 5 to about 60 weight percent, and more preferably about 10 to about 25 weight percent. James et al. teach copolymers that are useful as ophthalmic lenses (page 1, paragraph 0001). James et al. disclose the below general core structures compound: (page 2, para 0020 - page 3, paragraph 0039).



$[RSiO_{1.5})_{10}]_{12}$



(I)

[0021] wherein:

[0022] each Y is independently an activated unsaturated radical; and

[0023] each R is independently selected from the group consisting of a C_1-C_{12} monovalent hydrocarbon radical, a C_1-C_{12} monovalent hydrocarbon radical containing ether linkages, a halogen-substituted C_1-C_{12} monovalent hydrocarbon radical, and a halogen-substituted C_1-C_{12} monovalent hydrocarbon radical containing ether linkages.

James et al. also teach that useful silsesquioxane-based polymers may have smaller or large cage sizes than the structure shown below (see page 2, para 0020-0024). James et al. also teach POSS where R is cyclopentyl or isobutyl, which overlaps with the instant claimed invention (page 5, paragraph 0074).

Guichard et al. (US Patent 6,491,981) disclose functionalized silicone with perfluorinated (Rf) polyorganosiloxanes (POS) silicone deriviatives which can be used in cosmetic formulations (col. 3, line 40 to col. 4, line 54).

Based on the teaching of Legrow et al. that advantageously trimethylsilyl-alkylsilsesquioxanes are environmentally friendly and show excellent compatibility with many organic materials used in cosmetic formulations, someone of skill in the art would have been motivated to combine the teachings of the above cited prior art references to create the instant inventive concept so as to create environmentally friendly formulations (col.1 – col. 2).

Thus, someone of skill in the art at the time the instant invention was made would have found it obvious to create the instant claimed invention with reasonable predictability.

Nonstatutory Obviousness-Type Double-Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1, 3-42 and 47-51 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-30 of US Patent Application No. 10,790,280 (App. '280) in view of Yang et al. (US Patent Publication No. 2004/120915 A1). Although the conflicting claims are not identical, they are not patentably distinct from each other because the instant claims are either anticipated by, or would have been obvious in view of the referenced claims.

The instant claimed invention overlaps with the subject matter claimed in reference App. '280. For example, reference claim 1 of App. '280 is directed towards a personal care product comprising at least one EPOSS having a rigid three dimensional cage structure comprising nine or more Si atoms within its cage structure, said EPOSS being present in an amount effective to provide a desired degree of a predetermined personal care property and at least one personal care ingredient. Unlike the instant claims, App. '280 does not disclose a cage structure comprising between 6 to 8 Si atoms within its cage structure.

The above discussion of Yang et al. in connection with the rejection under 102(e) is incorporated by reference.

Thus, someone of skill in the art at the time the instant invention was made would have found it obvious to create the instant claimed invention with a reasonable expectation of success in view of App. '280 in view of James et al.

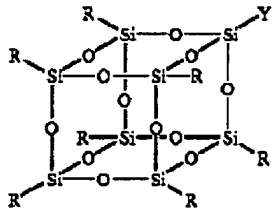
This is a provisional obviousness-type double patenting rejection because the conflicting claims of the copending applications have not in fact been patented.

Relevant Art of Record

The below cited art references made of record and relied upon are considered pertinent to applicant's invention.

Bonafini, Jr, et al. (US Patent 6586548) teach Polymeric biomaterials containing silsesquixane monomers having the below structures for preparing contact lens(see especially col. 11, lines 1-5; and claim 2):

POSS compound has the formula:



wherein:
each Y is independently an ethylenically unsaturated radical; and
each R is independently selected from the group consisting of a C_1–C_{12} monovalent hydrocarbon radical,

a C_1–C_{12} monovalent hydrocarbon radical containing ether linkages, a halogen-substituted C_1–C_{12} monovalent hydrocarbon radical, and a halogen-substituted C_1–C_{12} monovalent hydrocarbon radical containing ether linkages.

Hutchins et al. (US Patent 5,804,173) teach personal care compositions comprising a copolymer complex and a volatile, hydrophobic solvent component for solubilizing or dispersing the copolymer complex (column 1, lines 7-9). Hutchins et al. teach the copolymer complex is formed by complexing a fatty acid with a copolymer, wherein the copolymer comprises a hydrophobic monomer, a hydrophilic monomer such that at least 1% by weight of the total copolymer, comprises hydrophilic monomers bearing nitrogen functional groups, and optionally a hydrophobic macromonomer (column 1, lines 9-15). Hutchins et al. teach that the compositions of the invention provide improved delivery, deposition and retention to the hair and skin (column 1, lines 15-16). Hutchins et al. also teach that the copolymers of the invention can be formulated into a wide variety of product types, including mousses, gels, lotions, creams, ointments, tonics, sprays, aerosols, shampoos, conditioners, rinses, bar soaps, hand and body lotions, mascaras, antiperspirants, deodorants and the like (column 15, line 48 to column 20, line 67).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Charlesworth Rae whose telephone number is 571-272-6029. The examiner can normally be reached between 8 a.m. to 4:30 p.m. Monday to Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ardin Marschel, can be reached at 571-272-0718. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only.

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26 November 2007
CER

BRIAN-YONG S. KWON
PRIMARY EXAMINER

